ABSTRACT

A wireless Internet gateway which bridges the gap between the Internet and wireless devices, e.g., via a short message service center (SMSC). The disclosed wireless Internet gateway provides a portal to

5   SMPP, HTTP, TNPP, or other protocol messages using Java Remote Method Invocation (RMI) techniques. Application servers (e.g., in communication with the Internet or an Intranet) insert RMI objects containing messages in a message queue handler of the wireless Internet gateway. The RMI objects are queued and passed either directly to a

10   destination delivery handler (e.g., SMPP, SMTP, HTTP or TNPP protocol handler), or passed through a generic destination interface to provide an additional layer of abstraction to simplify development of the support of other destination protocols. An SMTP handler may be integrated into the wireless Internet gateway to provide direct communication of SMTP

15   protocol messages (i.e., e-mail) to the message queue. An SMPP link proxy module may be implemented to provide direct access between a local application server and the destination delivery handler. The SMPP link proxy module is particularly useful in the direction from the wireless network to the application server. From the generic destination interface

20   the messages are packaged into relevant messages of the particular destination protocol (e.g., SMPP), and transmitted to the relevant network element (e.g., to an SMSC). The disclosed wireless Internet gateway is flexible in that it is easily developed to support any input protocol (using RMI techniques with a relevant application server providing the particular

25   input protocol), and any output protocol developed to package messages from RMI message objects passed to a generic destination interface into the particular output protocol.